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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|-------------------------------|---------------------|------------------|
| 10/510,070 | 09/29/2004 | Vladimir Vladimirovich Kostin | 71545 | 4275 |

23872 7590 05/03/2006

MCGLEW & TUTTLE, PC
P.O. BOX 9227
SCARBOROUGH STATION
SCARBOROUGH, NY 10510-9227

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| EXAMINER |
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HITESHEW, FELISA CARLA

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| ART UNIT | PAPER NUMBER |
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1722

DATE MAILED: 05/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/510,070

Applicant(s)

KOSTIN, VLADIMIR
VLADIMIROVICH

Examiner

Felisa C. Hiteshew

Art Unit

1722

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>see attached paper</u> . | 6) <input type="checkbox"/> Other: ____ |

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

The Information Disclosure Statement under 37 C.F.R. 1.97 has been received and reviewed. However, the information disclosure is not deemed to be pertinent over the prior art of record.

Claim Rejections - 35 USC § 112

2. Claims 1-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, line 2, the terminology "characterized in that..." is being considered vague and indefinite. The terminology "...characterized in that..." does not meet up to date U.S. Patent practice standards. Is the claim language open or closed? The terminology is vague and indefinite.

In claim 2, line 1, the terminology "characterized in that..." is being considered vague and indefinite. The terminology "...characterized in that..." does not meet up to date U.S. Patent practice standards. Is the claim language open or closed? The terminology is vague and indefinite.

In claim 3, line 1, the terminology "characterized in that..." is being considered vague and indefinite. The terminology "...characterized in that..." does not meet up to

date U.S. Patent practice standards. Is the claim language open or closed? The terminology is vague and indefinite.

In claim 4, lines 1-2 the terminology "characterized in that..." is being considered vague and indefinite. The terminology "...characterized in that..." does not meet up to date U.S. Patent practice standards. Is the claim language open or closed? The terminology is vague and indefinite.

In claim 5, lines 1- 2, the terminology "characterized in that..." is being considered vague and indefinite. The terminology "...characterized in that..." does not meet up to date U.S. Patent practice standards. Is the claim language open or closed? The terminology is vague and indefinite.

In claim 6 lines 1-2, the terminology "characterized in that..." is being considered vague and indefinite. The terminology "...characterized in that..." does not meet up to date U.S. Patent practice standards. Is the claim language open or closed? The terminology is vague and indefinite.

In claim 7, lines 1- 2, the terminology "characterized in that..." is being considered vague and indefinite. The terminology "...characterized in that..." does not meet up to date U.S. Patent practice standards. Is the claim language open or closed? The terminology is vague and indefinite.

Allowable Subject Matter

3. As allowable subject matter has been indicated, applicant's reply must either comply with all formal requirements or specifically traverse each requirement not complied with. See 37 CFR 1.111(b) and MPEP § 707.07(a).


4. The following is a statement of reasons for the indication of allowable subject matter: The most relevant prior art of reference is that of Japanese abstract 10291896A. However, it does not teach nor fairly suggest singularly or in any combination thereof an apparatus for pulling single crystals, wherein the know device has a heater made out of a flexible carbon-containing material in the form of a cylinder, whose ends are secured between coaxially arranged rigid rings made of a carbon material, and connected to a power source, and also by determining the thickness of the heater wall by the equation:

$$\delta * \rho * c = 500-8599 \text{ J/m}^2$$

δ is the thickness of the wall of the heater, in m;

ρ is the density of the material of which the heater is made, in kg/m³

c is the specific heat capacity (at working temperature), J/kg*K, of the material of which the heater is made.


FELISA HITESHEW
PRIMARY EXAMINER
RU 1722